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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

05/06/2003

Samir A. Bhavsar, Esq. Baker Botts L. L. .P 2001 Ross Avenue, Suite 600 Dallas, TX 75201-2980 EXAMINER

SHINGLETON, MICHAEL B

ART UNIT

CLASS-SUBCLASS

2817

331-179000

DATE MAILED: 05/06/2003

| ļ | APPLICATION NO. | FILING DATE | i. | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|-------------|----|----------------------|---------------------|------------------|
| • | 10/052,104 | 01/16/2002 | • | Shih-Tsung Yang | 04939P019 | 9853 |

TITLE OF INVENTION: METHODS AND APPARATUSES FOR TUNING VOLTAGE CONTROLLED OSCILLATORS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1300 | \$0 | \$1300 | 08/06/2003 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE Commissioner for Patents

Alexandria, Virginia 22313-1450

Fax (703)746-4000

| appropriate. All further corr indicated unless corrected b maintenance fee notifications | espondence including the elow or directed otherwis s. | Patent, advance orders e in Block 1, by (a) sp | s and notification ecifying a new co | of maintenance fe | required). Blocks 1 through 4 sees will be mailed to the current lress; and/or (b) indicating a sepa | correspondence address a |
|---|--|--|---|--|--|--|
| CURRENT CORRESPONDENCE 759 Samir A. Bhavsar | | p with any corrections or use b | Block 1) | Fee(s) Transmi | ate of mailing can only be used for ittal. This certificate cannot papers. Each additional paper, s must have its own certificate of n | be used for any other such as an assignment or |
| Baker Botts L. L. F 2001 Ross Avenue, Dallas, TX 75201-2 | Suite 600 | • | | envelope addres | Certificate of Mailing or Trans that this Fee(s) Transmittal is sostal Service with sufficient posta sed to the Box Issue Fee address e USPTO, on the date indicated b | being deposited with the ge for first class mail in an above, or being facsimile |
| | | | | | | (Depositor's name) |
| | | | | | | (Signature) |
| | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | FIRS | ST NAMED INVEN | TOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/052,104 | 01/16/2002 | l . | Shih-Tsung Yang | | 04939P019 | 9853 |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLI | CATION FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1300 | | \$0 | \$1300 | 08/06/2003 |
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| EXAMIN | | ART UNIT | CLASS-SUBCL | | | |
| SHINGLETON, N | MICHAEL B | 2817 | 331-17900 | 0 | | |
| 1. Change of correspondence CFR 1.363). | ce address or indication of | "Fee Address" (37 | the names of up | on the patent from | patent attorneys 1 | · · |
| Address form PTO/SB/12 | • | • | single firm (ha | alternatively, (2) ving as a memb ent) and the nam | per a registered | *** |
| | on (or "Fee Address" Indica r more recent) attached. Us | | | t attorneys or age e will be printed. | ents. If no name | · |
| 3. ASSIGNEE NAME AND | RESIDENCE DATA TO | BE PRINTED ON THE | PATENT (print o | r type) | | |
| PLEASE NOTE: Unless ar been previously submitted t (A) NAME OF ASSIGNEE | to the USPTO or is being s | ubmitted under separate | ill appear on the pecore. Completion SIDENCE: (CITY | n of this form is N | f assignee data is only appropriat IOT a substitute for filing an assig COUNTRY) | te when an assignment has gnment. |
| Diagraphical the summer sists | | anian Kaniff ann ba mainean | 4 41 | D to the table 1 | O company to the state of the | |
| Please check the appropriate 4a. The following fee(s) are 6 | | | yment of Fee(s): | undividual | corporation or other private g | roup entity \(\mathred{\text{government}} \) |
| ☐ Issue Fee | | • | neck in the amount | of the fee(s) is en | closed. | |
| ☐ Publication Fee | | | ment by credit card | . ` ′ | | |
| ☐ Advance Order - # of Co | pies | ☐ The Denosi | Commissioner is l | nereby authorized | by charge the required fee(s), or commendate (enclose an extra copy of this | credit any overpayment, to |
| Commissioner for Patents is | requested to apply the Issu | | | | usly paid issue fee to the applicat | |
| (Authorized Signature) | | (Date) | , - | - | | |
| NOTE; The Issue Fee and other than the applicant; a interest as shown by the rec | registered attorney or ag ords of the United States P | ent; or the assignee of atent and Trademark Of | r other party in ffice. | | | |
| This collection of informat obtain or retain a benefit be application. Confidentiality estimated to take 12 minute completed application form case. Any comments on the suggestions for reducing the Patent and Trademark C 22313-1450. DO NOT SI SEND TO: Commissioner 1 | ion is required by 37 CFI by the public which is to is governed by 35 U.S.C. es to complete, including a to the USPTO. Time w the amount of time you is burden, should be sent office, U.S. Department END FEES OR COMPLI or Patents, Alexandria, Vi | 1.311. The informatic file (and by the USPTC 122 and 37 CFR 1.14. T pathering, preparing, an- ill vary depending upo require to complete to to the Chief Informati- of Commerce, Alexa STED FORMS TO TH ginia 22313-1450. | on is required to 2 to process) an Ihis collection is d submitting the on the individual his form and/or on Officer, U.S. andria, Virginia HIS ADDRESS. | | | |

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------------|----------------|----------------------|-------------------------|------------------|--|
| 10/052,104 01/16/2002 | | Shih-Tsung Yang | 04939P019 | 9853 | |
| . 7: | 590 05/06/2003 | | EXAMIN | ER | |
| Samir A. Bhavsar, Esq. | | | SHINGLETON, MICHAEL B | | |
| Baker Botts L. L 2001 Ross Avenue | | | ART UNIT | PAPER NUMBER | |
| Dallas, TX 75201-2980 | | | 2817 | | |
| | | | DATE MAILED: 05/06/2003 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 51 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 51 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.urpfo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------|
| 10/052,104 01/16/2002 7590 05/06/2003 Samir A. Bhavsar, Esq. Baker Botts L. LP 2001 Ross Avenue, Suite 600 | | Shih-Tsung Yang | . 04939P019 | 9853 |
| | | | EXAMIN | ER |
| | | | SHINGLETON, MICHAEL B | |
| | | | ART UNIT | PAPER NUMBER |
| Dallas, TX 75201 | | • | 2817 | |
| UNITED STATES | | | DATE MAILED: 05/06/2003 | |

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Application/Control Number: 10/052,104

Art Unit: 2817

The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose a method and device that divides the frequency range into a plurality of frequency bands of interest and measures the frequency output of a VCO that has a plurality of capacitance levels used for tuning and obtaining a plurality of frequency vs. input VCO voltages for each of the capacitance levels. The set of voltage levels applied to the input of the VCO includes uniform increments so that an accurate measurement of the slope can be obtained which is used to select the appropriate charge pump current. The frequency range is determined by the output voltage of a digital-to-analog converter that provides the set voltage level of uniform increments (See page 6 of the specification.)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is 703-308-4903. The examiner can normally be reached on Monday-Thursday from 8:00 to 4:30. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

MBS April 29, 2003

PRIMARY EXAMINAR

BOILE VETTINITERS 7



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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FILING DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NO.

| EXA | MINER |
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| | |
| ART UNIT | PAPER NUMBER |
| | 7 |

DATE MAILED:

This is a communication from the examiner in charge of this application. COMMISSIONER OF PATENTS AND TRADEMARKS

Examiner's Statement of Reasons for Allowance

| NOTICE OF ALLOWABILITY | · |
|---|--|
| All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this app previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication w NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to w initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to | vill be mailed in due course. THIS rithdrawal from issue at the |
| The drawings filed on 1-16-2002 are acceptable as formal drawings. | |
| Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | |
| □ All □ Some* □ None of the: □ Certified copies of the priority documents have been received. □ Certified copies of the priority documents have been received in Application No. □ Copies of the certified copies of the priority documents have been received in this national International Bureau (PCT Rule 17.2(a)). | |
| *Certified copies not received: | · |
| Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply of below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MOI FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION. This with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 | NTH PERIOD IS NOT EXTENDABLE is three-month period for complying |
| Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED. | -152, which discloses that |
| ☐ Applicant MUST submit NEW FORMAL DRAWINGS | |
| because the originally filed drawings were declared by applicant to be informal. | |
| ☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, at | tached hereto or to Paper No |
| including changes required by the proposed drawing correction filed on | , which has been approved |
| ☐ including changes required by the attached Examiner's Amendment/Comment or in the Office a | action of Paper No |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on | the drawings. |
| □ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOL | LOGICAL MATEŘIAL. |
| Any reply to this notice should include, in the upper right hand comer, the APPLICATION NUMBER applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and I ALLOWANCE should also be included. | |
| Attachment(s) | |
| Notice of References Cited, PTO-892 | |
| Information Disclosure Statement(s), PTO-1449, Paper No(s). | _ 4 |
| □ Notice of Draftsperson's Patent Drawing Review, PTO-948 | MidBell |
| ☐ Notice of Informal Patent Application, PTO-152 | Mar D. Str. |
| ☐ Interview Summary, PTO-413 | PRIMARY E AMENDE |
| Examiner's Amendment/Comment Examiner's Comment Regarding Requirement for the Deposit of Biological Material | ROLIPARTIINT 2817 |
| Examine a comment regarding requirement for the peposit of piological material | |